PROGRESS
OF
MEDICAL SCIENCE

MEDICINE

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The Retinitis of Diabetes Mellitus.—Wagener and Wilder (*Jour. Am. Med. Assn.*, 1921, lxxvi, 515). Forty-five cases of retinal disease were noted in the course of a study of 300 diabetics at the Mayo Clinic. About 80 of the total number of cases represented were examples of so-called "diabetes gravis," characterized by acute onset of the disease and its progressively increasing severity, and not one of these showed retinal changes. Retinitis occurred exclusively in diabetic patients, with mild, easily controlled glycosuria and in whom evidence of vascular disease was always present. They believe that "the retinitis of diabetes is the retinitis of cardiovascular-renal disease, modified in appearance and in stage of occurrence, possibly by the metabolic disturbances associated with the diabetes."

Immunological Distinctions of Encephalitis and Poliomyelitis.—Amoss (*Jour. Exp. Med.*, 1921, xxxiii, 187). The author recalls that some observers believe encephalitis and poliomyelitis to be manifestations of the same disease, and that many have noted points of similarity. He summarizes the main differences existing between these two diseases as follows: (1) In lethargic encephalitis the clinical manifestations depend in the main on basal ganglion lesions; in poliomyelitis the main lesions occur in the gray matter of the spinal cord and medulla oblongata. (2) The tendency for poliomyelitis to occur in the summer and autumn months and for lethargic encephalitis to occur in the winter and spring months. (3) Differences in communicability of the disease to monkeys. Poliomyelitis is transmitted with ease by inoculating monkeys with affected nervous tissue from man, while it is doubtful whether lethargic encephalitis has ever been so transmitted. The author then applies, as a means of distinguishing the two diseases, protection experiments. Under certain circumstances the blood serum of convalescent poliomyelitis cases neutralizes the virus of poliomyelitis when the latter is injected into monkeys. Blood serum from four convalescent encephalitis cases (fifth week, fourth month, fifth month and fifteenth month) gave no protection to monkeys against subsequent inoculation with the virus of epidemic poliomyelitis. The monkeys (controls) which were protected by serum from a monkey which had had experimental poliomyelitis survived.

Pseudo-polycythemia; Extraordinary Blood Changes in a Patient with Renal Calculus.—Herman and Lyon (*Annals of Surgery*, 1921, lxxiii, 223). The authors report an unusual case of polycythemia in a patient, aged forty-nine years, coming under observation for renal calculus and pyelitis. The blood showed 11,496,000 red blood cells; hemoglobin, 120 per cent.; and 11,600 white blood cells before operation. No cyanosis, splenomegalia nor other signs of polycythemia were present. Three days after removal of the affected kidney the blood picture showed a remarkable change: red blood cells, 5,504,000; hemoglobin, 108 per cent.; white blood cells, 11,200. Thirteen days after operation the red count and hemoglobin were found to be normal, but there were 242,000 leukocytes, with the following differential formula: Polymorphonuclears, 74 per cent.; small mononuclears, 13 per cent.; large lymphocytes, 4 per cent.; transitionals, 5 per cent.; acidophiles, 4 per cent.; and basophiles, 1 per cent. Four days later the blood examination was reported as follows: Red blood cells, 4,360,000; Hemoglobin, 88 per cent.; white blood cells, 22,800. Differential formula: Polymorphonuclears, 81 per cent.; lymphocytes, 16 per cent.; transitionals, 2 per cent.; acidophiles, 1 per cent. Convalescence from operation was uneventful. One year after operation the blood was found to be normal.

Angina Pectoris; An Electrocardiographic Study.—Willius (*Arch. Int. Med.*, 1921, xxvii, 192). The author studied 155 cases of angina pectoris. Nineteen (12.2 per cent.) had recognizable aortic disease; 2 (1.3 per cent.) had mitral stenosis; 134 (86.5 per cent.) had "indeterminate pathological lesions, granting that we must discard the view of coronary disease accepted as true for many years and revealed at necropsy innumerable times." The author finds it difficult to classify this last group (86.5 per cent.) without utilizing the coronary disease hypothesis as the explanation of their angina. Of the total number (155) 128 were male and 27 were female patients. The greatest number (59) occurred in the sixth decade, 45 occurred in the seventh decade and 34 in the fifth. Seven patients in the series had angina, with no demonstrable objective evidence (including significant electrocardiographic abnormalities) of heart disease. From the study Willius arrives at the following conclusions: "(1) There are no electrocardiographic findings pathognomonic of angina pectoris. (2) Significant *T* wave negativity occurred in one-third of the electrocardiograms (32.9 per cent.) and is an important abnormality. (3) Abnormalities in *T* wave contour affecting both the positive and negative wave are significant. (4) Abnormal *QRS* complexes in all derivations of the electrocardiogram occurred in 14.2 per cent. of the records. (5) The cardiac mortality of the entire group was 46.7 per cent., definitely contrasted with the higher mortality of those patients having significant *T* wave negativity (70.3 per cent.) and abnormal *QRS* complexes in all derivations (62.5 per cent.) of their electrocardiograms."

SURGERY

UNDER THE CHARGE OF

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Multiple Polyposis of the Intestinal Tract.—STRUTHERS (*Annals of Surgery*, 1920, lxxii, vi, 849) says that multiple polyposis of the intestinal tract is a serious disease from the standpoint of morbidity and mortality. The etiology of the intestinal polypus is not known, although chronic ulcerative colitis and intestinal infections appear to be factors. There is no specific medical treatment and operation undoubtedly offers the best results in the more advanced cases. The rectum, the sigmoid, and the splenic and hepatic flexures are most frequently involved. The small intestines are rarely involved. The predominant symptoms are diarrhea, with the passage of pus and blood, vague abdominal pain, and rectal tenesmus. The so-called essential hemorrhage, if present, is almost pathognomonic. Proctoscopic examination should be done routinely in all cases of dysentery. Adenomas do not seem to become malignant more often than polypi and papillomas. In cases in which polypi were associated with carcinoma, they were usually found below the cancerous growth farther along in the intestinal tract. Most marked involvement of the colon is found in the cases which begin as a mild diarrhea and later become chronic. The more sudden and severe the onset the more localized the condition in the colon. Multiple polyposis of the intestinal tract is more frequent in males than in females, a proportion of 2 to 1.

Persistence of Pyloric and Duodenal Ulcers Following Simple Suture of an Acute Perforation.—LEWISOHN (*Annals of Surgery*, 1920, lxxii, v, 595) says that immediate gastro-enterostomy in the treatment of perforated pyloric and duodenal ulcers does not increase the mortality. Gastro-enterostomy and pyloric exclusion simplifies the postoperative treatment considerably. Simple closure of the perforation will not cause a cure of the ulcer in a considerable number of cases. Gastro-enterostomy will guarantee proper drainage of the stomach contents and overcome partial obstruction of the pylorus caused by postoperative adhesions. Closure of the perforation, gastro-enterostomy, and pyloric